

ABSTRACT

Title:

Verification of the effect of Ventolin Inhaler N in athletes without a diagnosis of asthma.

Thesis' objective:

The main objective of this Thesis is to determine whether the medicament Ventolin Inhaler N affects the performance of athletes without a diagnosis of asthma. Specifically, it is about how this medicament influences the parameters in aerobic and anaerobic zone, spirometric parameters and total performance. The other objective is to verify if any of the adverse events of Ventolin Inhaler N appears before the load.

Methods:

The descriptive analysis method for obtaining information about the issue is used in this Thesis. A test up to a vita maxima on a treadmill according to the protocol of Bunce, spirometric measurement and an answer sheet for the evaluation of subjective feelings immediately after the test is used for the research. Test was realized using a method repeated measurement, each tested person passed the test twice, once using the Ventolin Inhaler N and once without it. Results were recorded into tables and analyzed in SPSS programme using statistical methods.

Results:

The medicament Ventolin Inhaler N affects the performance of athletes without a diagnosis of asthma. The Ventolin influences the spirometric parameters measured before the test (FEV_1 , FVC), the spirometric parameters measured after the test (FEV_1), spiroergometry of submaximal speed 11 and 13 km/h (RER), maximal spiroergometry (time of the test to $RER = 1$, VO_{2max}/kg , VE_{max} a RER_{max}). Statistical significant difference was found during the Ventolin test in incidence of cramps. No others adverse events were detected.

Key-words:

Endurance abilities, performance, test to a vita maxima, spirometry (pulmonary function tests), asthma bronchiale, Ventolin Inhaler N, doping